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ALM:1



## UNITED STATES DEPARTMENT OF COMMERCE

## Patent and Trademark Office

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APPLICATION NUMBER	FILING DATE	34M1 FIRST NAMED APPLICANT	LEE, K	ATTY. DOCKET NO.
SUGHRUE MION ZINN MACPEAK & SEAS				
2100 PENNSYLVANIA AVENUE NW				
WASHINGTON DC 20037-3202				
			EXAMINER	
			3407	
		ART UNIT	PAPER NUMBER	
			01/26/98	
			2417	

DATE MAILED:

This is a communication from the examiner in charge of your application.  
COMMISSIONER OF PATENTS AND TRADEMARKS

## OFFICE ACTION SUMMARY

- ☐ Responsive to communication(s) filed on \_\_\_\_\_
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 D.C. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire THREE month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

- ☒ Claim(s) 3 is/are pending in the application.
- ☒ Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 3 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☒ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been
- ☐ received.
- ☒ received in Application No. (Series Code/Serial Number) 08/186,469
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

- ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- ☒ Notice of Reference Cited, PTO-892
- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- ☐ Interview Summary, PTO-413
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Notice of Informal Patent Application, PTO-152

-SEE OFFICE ACTION ON THE FOLLOWING PAGES-

Best Available Copy

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### DETAILED ACTION

1) Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In line 9 of the claim, "the valve" lacks antecedent basis. In line 9, "the ideal isentropic flow" is vague and indefinite.

2) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kelley et al in view of Zingg. The patent to Kelley et al discloses a gas flow control device (17) connected to a tubing for use in oil wells producing by continuous gas-lift. The gas flow control device lacks having a nozzle restrictor in the housing to reduce the gas pressure flowing through the control device. The patent to Zingg teaches the use of a nozzle restrictor (16) having a curved inlet portion, a smooth straight intermediate portion, and a smooth, outwardly tapered conical shaped outlet portion, see Figure 1. Zingg teaches that the nozzle restrictor can be used in wells to restrict the pressure of the gas flowing therethrough, see col. 1, lines 47-49 and col. 4, lines 4-17. In view of the teaching of Zingg, it would have been obvious to one of ordinary skill in the art at

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the time of the invention to have modified the device of Kelley et al to include a nozzle having a curved inlet portion, a smooth straight intermediate portion, and a smooth, outwardly tapered conical shaped outlet portion to reduce the pressure of the gas flowing through the gas-lift device.

3) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 3 is rejected under 35 U.S.C. 102(b) as being anticipated by Troy.

The patent to Troy discloses a flow restrictor (38) connected to a tubing (10). The restrictor includes a curved inlet portion, a smooth straight intermediate portion, and a smooth, outwardly tapered conical shaped portion. The recitation of "gas flow control device" and "for use in oil wells producing continuous gas-lift" in claim 3 of the instant application is considered to be intended use and is given no patentable weight.

4) Any inquiry concerning this communication should be directed to KEVIN LEE at telephone number (703) 308-1025. The AU3407 fax number is (703) 308-7765.

JANUARY 16, 1998

*Kevin Lee*  
KEVIN LEE  
PRIMARY EXAMINER  
GROUP 3400